Bradley Marks and Charles Ofria named 2017 William J. Beal Outstanding Faculty Award winners

Two from the College of Engineering -- Bradley Marks and Charles Ofria -- will be honored with William J. Beal Outstanding Faculty Awards during Michigan State University’s annual Awards Convocation on Tuesday, Feb. 7.

MSU will celebrate the accomplishments of 10 faculty winners and other recipients of all-university awards during the convocation at 3:30 p.m. at Wharton Center’s Pasant Theatre. The 2017 honorees bring the number of MSU faculty honored to 541 since the award was established in 1952.

Colleagues, friends and family are invited to share the event with the awardees.

MSU President Lou Anna K. Simon will salute their contributions to the university’s excellence. Simon also will take a few minutes to acknowledge MSU's Founders Day as well as deliver the 2017 State of the University address.

The College of Engineering faculty members being recognized are:

Bradley Marks
College of Agriculture and Natural Resources
College of Engineering
Department of Biosystems and Agricultural Engineering
Bradley Marks is internationally known for leading a successful interdisciplinary research team focused on the microbial safety of ready-to-eat food products. An engineer by training, Marks has expanded his expertise to food microbiology and predictive modeling to meet the challenges of reducing foodborne disease outbreaks in meats, fresh-cut fruits and vegetables and low-moisture foods. In particular, his work is renowned for modeling the inactivation of foodborne pathogens and improving methods for the design, operation and validation of pathogen reduction processes for manufactured food products. His research lays the foundation for processing standards used by federal and state regulators of the processing industry.

Marks’ research has been continuously supported for more than twenty-three years by federal competitive grants, industry support and state and internal funding sources, including the USDA. He has written more than eighty-one referenced journal articles and has more than 270 total publications and presentations at national and international conferences.

Marks is well-known for his conscientious mentoring of undergraduates, graduate students and faculty colleagues, with former students employed throughout the U.S. food industry.

One recent graduate wrote, “Dr. Marks was, by far, the most critical influence on my professional life due to his leadership skills and passion to see his students succeed.”

Marks has taught 12 distinct courses over the past 22 years, including seven that he developed at the freshman, junior, senior and graduate levels.

His enthusiasm for teaching has led to nine teaching awards at the department, college and national level, including
four Withrow Teaching Awards, the MSU Teacher-Scholar Award, and a national teaching award from the American Society of Agricultural and Biological Engineers. Under his departmental leadership as the undergraduate program coordinator, undergraduate enrollment has tripled over the past decade.

Charles Ofria is recognized internationally for his research at the interface of computer science and evolutionary biology. He developed the Avida Digital Evolution Research Platform, wherein self-replicating computer programs are subject to mutations and selective pressures resulting in an open-ended evolutionary process. Because these digital organisms exist inside a computer, Ofria can easily study long-term evolutionary processes and, in turn, apply what he learns toward solving computational problems.

Ofria is one of the founders of the $50 million BEACON Center for the Study of Evolution in Action at MSU, an NSF-supported center that allows engineers with an applied evolutionary focus to work with evolutionary biologists to create a theoretical foundation for both computational and biological research.

As part of his role in founding the BEACON Center for the Study of Evolution in Action, Ofria developed a multidisciplinary course on Multidisciplinary Research Methods for the Study of Evolution, for the purpose of mentoring students on the research process at the intersection of fields. He covers communicating across fields, developing interesting research questions, performing literature searches, formulating and testing hypotheses (along with using simple statistics) and presenting research results so they are accessible to a range of audiences.

Each year, multiple groups in the class publish their work after the end of the semester, with students universally
agreeing that they have gained tremendous insight into the research process. Teaching reviews from other classes note his ability to convey abstract concepts in a practical manner, often through live-coding demonstrations, real-world examples and instructional technologies that provide students with instantaneous feedback.

His teaching has been recognized with the MSU Teacher–Scholar and the Withrow Teaching Awards.

Ofria is the president of the International Society for Artificial Life and a member of the editorial board for “PeerJ Computer Science.” He is active in reviewing articles for a number of prestigious journals, including “Nature,” “Communications of the ACM: IEEE Proceedings of Artificial Intelligence” and “Journal of Theoretical Biology.”

Watch celebration at WKAR.org
There will be a link to the live stream of the celebration at wkar.org and www.ahr.msu.edu/all-university-awards. The William J. Beal Outstanding Faculty Awards are supported by the Office of University Development.

William James Beal (March 11, 1833 – May 12, 1924) was an American botanist, who was professor of botany (1871-1910) and curator of the museum (1882-1903) at the Michigan Agricultural College (MAC), now MSU. He was a pioneer in the development of hybrid corn and the founder of MSU’s renowned W. J. Beal Botanical Garden.

Related Website: Story courtesy of MSUToday.
2017 Outstanding Faculty Awards
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